

POLARIZED LIGHT SOURCE SYSTEM AND LIQUID CRYSTAL DISPLAY USING THE SAME

Abstract

A polarized light source system (20) includes a light guide plate (22), a light source (24), a lamp cover (25), a quarter wave plate (23), an upward prism plate (26) and a downward prism plate (28). The light guide plate defines an optical inputting surface and an optical outputting surface interconnecting therewith. The light source and the lamp cover are stationed next to the optical inputting surface. The upward prism plate stationed next to the optical outputting surface defines a plurality of upward micro-prisms (262) on a surface opposite thereto. The downward prism plate stationed next to the upward prism plate includes a brightness enhancing film (284), and a plurality of downward micro-prisms (282) on a surface facing the upward prism plate. The upward and downward micro-prisms engaged with each other. The quarter wave plate includes a reflective film on a backing surface.